CLAIMS

1. CO_2 slab laser having a gas-filled chamber limited by a tubular housing (10), with at least two electrodes that extend into the tubular housing, overlap one another and form a discharge chamber, and with resonator mirrors, characterized in that

- the electrodes are each held at the opposite ends of the tubular housing,
- the mirrors are arranged stationary relative to the electrodes and
- the electrodes, jointly with the mirrors, are adjustable relative to one another.

2. CO_2 slab laser having a gas-filled chamber limited by a tubular housing, with at least two electrodes that extend into the tubular housing, overlap one another and form a discharge chamber, and with resonator mirrors, characterized in that

- the electrodes are each held at the opposite ends of the tubular housing,
- the mirrors are designed in one piece with the electrodes and
- the electrodes, jointly with the mirrors, are adjustable relative to one another.

3. CO_2 slab laser according to Claim CO_2 slab laser having a gas-filled chamber limited by a tubular housing (10), with at least two electrodes that extend into the tubular housing, overlap one another and form a discharge chamber, and with resonator mirrors,

characterized in that

- the electrodes each are held at the opposite ends of the tubular housing,
- the mirrors are arranged stationary relative to the electrodes and
- the electrodes, jointly with the mirrors, are adjustable relative to one another.

4. CO_2 slab laser having a gas-filled chamber limited by a tubular housing, or *[Claim?]* 2, characterized in that the electrodes are held by the end pieces sealing off the tubular housing.

5. CO_2 slab laser according to Claim 3, characterized in that the electrodes are designed in one piece with the end pieces.

6. CO_2 slab laser according to Claim 3 or 4, characterized in that the mirrors are designed in one piece with the end pieces.

7. CO_2 slab laser according to any one of the preceding claims, characterized in that the tubular housing (10) is designed in two parts, where the two parts are designed adjustable relative to one another.

8. CO_2 slab laser according to Claim 3, 4 or 5, characterized in that at least one of the end pieces is attached to the tubular housing (10) by way of a flexible bearing.

9. CO_2 slab laser according to Claim 7, characterized in that the flexible bearing is a bellows.

10. CO_2 slab laser according to any one of the preceding claims, characterized by adjusting elements (20) that are supported on the tubular housing and act on the electrodes.

11. CO_2 slab laser according to Claim 9, characterized in that the adjusting elements contain piezoelectric crystals which are capable of being driven electrically.

12. CO_2 slab laser according to any one of the preceding claims, characterized in that the tubular housing (10) is designed cylindrical and the electrodes in section form a circular segment whose radius is smaller than the inside radius of the tubular housing.

13. CO_2 slab laser according to any one of the preceding claims, characterized in that the electrodes and hence the mirrors are fixed relative to one another after adjustment.